

Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Sodium selenite pentahydrate

Number : 000000020657

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442
USA

For further information, please contact: : 1-800-368-0050
+1-231-726-3171
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**
In Japan: **+(81)-345209637**

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification of the substance or mixture : Acute toxicity, Category 2, Oral
Acute toxicity, Category 2, Inhalation
Skin irritation, Category 2
Eye irritation, Category 2A
Skin sensitizer, Category 1
Short-term (acute) aquatic hazard, Category 2
Long-term (chronic) aquatic hazard, Category 2

GHS Label elements, including precautionary statements

Symbol(s)

:



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

Signal word : Danger

Hazard statements : Fatal if swallowed or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/ eye protection/ face protection.
Wear respiratory protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/ doctor.

Rinse mouth.

If skin irritation or rash occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Collect spillage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not : Contact with acids liberates toxic gas.

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

result in classification

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : $\text{Na}_2\text{SeO}_3 \cdot 5\text{H}_2\text{O}$

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Sodium selenite pentahydrate	26970-82-1	100.00 %
Sodium selenite pentahydrate		

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Immediately take off contaminated clothing and rinse body with plenty of water.
First aider needs to protect himself.
Call a physician immediately.
- Inhalation : If breathed in, move person into fresh air.
Call a physician immediately.
- Skin contact : Then wash with lots of water and soap.
Call a physician immediately.
- Eye contact : Protect unharmed eye.
Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes.
Call a physician immediately.
- Ingestion : Immediate medical attention is required.
A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor immediately together with this card
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

- | | |
|---|---|
| Suitable extinguishing media | : Water spray jet
Foam
Carbon dioxide (CO ₂)
Dry powder |
| Specific hazards during firefighting | : In case of fire hazardous decomposition products may be produced such as:
Toxic metal oxide fumes |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas. |
| Further information | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Immediately evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Keep people away from and upwind of spill/leak.
Avoid dust formation.
Do not breathe dust.
Do not get in eyes, on skin, or on clothing. |
| Environmental precautions | : Do not flush into surface water.
Prevent further leakage or spillage if safe to do so. |
| Methods and materials for containment and cleaning up | : Use mechanical handling equipment.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations. |

7. HANDLING AND STORAGE

Handling

- | | |
|-------------------------------|--|
| Precautions for safe handling | : Wear personal protective equipment.
Avoid formation of respirable particles.
Protect from contamination.
Avoid exposure - obtain special instructions before use.
Use only in well-ventilated areas. |
| Advice on protection against | : The product itself does not burn. |

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

fire and explosion

Normal measures for preventive fire protection.

StorageConditions for safe storage,
including any
incompatibilities

: Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from physical damage.
Store in a place accessible by authorized persons only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Sodium selenite pentahydrate Sodium selenite pentahydrate	26970-82-1	TWA : Time weighted average	0.1 mg/m ³	04 2007	Japan Society for Occupational Health: Japan Society for Occupational Health allowable concentration recommendation value
Further information	:	Expressed as : as Se			

Appropriate engineering controls

Local exhaust

Individual protection measures, such as personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection : Wear nitrile rubber gloves to avoid contact with the skin.
Gloves must be inspected prior to use.
Replace when worn.

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

Eye protection	: Safety goggles
Skin and body protection	: Wear suitable protective equipment. Complete suit protecting against chemicals Lab coat
Hygiene measures	: Separate rooms are required for washing, showering and changing clothes. Keep working clothes separately. When using, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace.
Protective measures	: Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Do not breathe dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: crystalline
Colour	: colourless
Odour	: odourless
Odour Threshold	: Note: No data available
pH	: 9 at 50.00 g/l, 20 °C
Melting point/range	: Note: Not applicable, Decomposition
Boiling point/boiling range	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

Upper explosion limit	: Note: Not applicable
Vapour pressure	: Note: negligible
Vapour density	: Note: No data available
Density	: Note: No data available
Water solubility	: 898 g/l at 25 °C Note: anhydrous substance
Partition coefficient: n-octanol/water	: Note: No data available
Auto-ignition temperature	: Note: not auto-flammable
Decomposition temperature	: 40 °C Note: Loss of water of crystallization on heating. > 320 °C Note: Decomposes on heating., Hazardous decomposition products formed under fire conditions.
Viscosity, dynamic	: Note: Not applicable
Viscosity, kinematic	: Note: Not applicable
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 263.01 g/mol
Bulk density	: Note: No data available

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous	: Contact with acids liberates toxic gas.

Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

reactions

Conditions to avoid

: Protect from contamination.
Protect from heat/overheating.
Protect from atmospheric moisture and water.

Incompatible materials to avoid

: Acids
Strong oxidizing agents

Hazardous decomposition products

: In case of fire hazardous decomposition products may be produced such as:
Toxic metal oxide fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Acute oral toxicity

: Inhalation, Eye contact, Skin contact, Ingestion
: LD50: 7 mg/kg
Species: Rat
Test substance: anhydrous substance

Acute inhalation toxicity

: LC50: > 0.052 - 0.51 mg/l , dust/mist
Exposure time: 4 h
Species: Rat, male and female
Method: OECD Test Guideline 403

Acute dermal toxicity

: Note: No data available

Skin corrosion/irritation

: Result: Skin irritation
Method: OECD Test Guideline 439
Test substance: anhydrous substance

Serious eye damage/eye irritation

: Note: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Respiratory or skin sensitisation

: Species: Mouse
Result: Causes sensitisation.
Method: OECD Test Guideline 429

Repeated dose toxicity

: Species: Mouse
Application Route: Oral

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

Exposure time: 90 d

NOAEL (No observed adverse effect level): 0.9 mg/kg

Test substance: anhydrous substance

Carcinogenicity : Note: No data available

Aspiration toxicity : Not applicable

12. ECOLOGICAL INFORMATION

Aquatic and ecotoxicity

Toxicity to fish : LC50: 2.06 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
Note: as Se

: NOEC: 0.01 mg/l
Exposure time: 258 d
Species: Lepomis macrochirus (Bluegill sunfish)
Note: as Se

Toxicity to daphnia and other aquatic invertebrates : semi-static test
LC50: 0.55 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Note: as Se

Toxicity to algae : NOEC: 0.197 mg/l
Exposure time: 96 h
Species: Chlamydomonas reinhardtii
Note: as Se

: EC50: 0.245 mg/l
Exposure time: 96 h
Species: Chlamydomonas reinhardtii
Note: as Se

Toxicity to daphnia and other aquatic invertebrates : NOEC: 0.07 mg/l
Exposure time: 28 d

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

(Chronic toxicity)

Species: Daphnia magna (Water flea)

Note: as Se

Persistence and degradability

Other adverse effects

Additional ecological
information

: The methods for determining biodegradability are not
applicable to inorganic substances.

13. DISPOSAL CONSIDERATIONS

Disposal methods

: In accordance with local and national regulations.

14. TRANSPORT INFORMATION

ADR

UN/ID No.

: UN 2630

Description of the goods

: SELENITES

(SODIUM SELENITE)

Class

: 6.1

Packing group

: I

Classification Code

: T5

Hazard Identification Number

: 66

Labels

: 6.1

IATA

UN/ID No.

: UN 2630

Description of the goods

: Selenites

(Sodium selenite)

Class

: 6.1

Packing group

: I

Labels

: 6.1

Packing instruction (cargo
aircraft)

: 673

Packing instruction

: 666

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

(passenger aircraft)

IMDG

UN/ID No.	: UN 2630
Description of the goods	: SELENITES (SODIUM SELENITE)
Class	: 6.1
Packing group	: I
Labels	: 6.1
EmS Number 1	: F-A
EmS Number 2	: S-A
Marine pollutant	: yes

15. REGULATORY INFORMATION

National regulatory information

Vessel Safety Law : Toxic and infectious substances (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
JP VSL

Aviation Law : Toxic and infectious substances (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
JP AVL

Fire Service Law : Not relevant

Japan. ISHL Hazardous Substances Labeling Requirements (ISHL Art. 57, Enforcement Order Art. 18, Enforcement Rule Art. 30 & 31, as amended through 6 April 2018) : Listed
Sodium selenite pentahydrate 26970-82-1

Japan. SDS and Risk Assessment Requirements (ISHL Art. 57-2 and 57-3, Enforcement Order Art. 18-2, : Listed
Sodium selenite pentahydrate 26970-82-1

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

Enforcement Rule Art. 34-2
and 34-2-2), as amended
Poisonous and Deleterious
Substances Control Law

: Poisonous substance not for pharmaceutical use
18
Listed
Sodium selenite pentahydrate 26970-82-1

Act on Confirmation, etc. of
Release Amounts of Specific
Chemical Substances in the
Environment and Promotion
of Improvements to the
Management Thereof

: Class 1
242
Listed
Sodium selenite pentahydrate 26970-82-1

Other international regulations

Notification status

US. Toxic Substances
Control Act

: On TSCA Inventory

Australia. Industrial
Chemicals Act (AIIIC), as
amended

: Not in compliance with the inventory

Canada. Canadian
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL)

: All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List

: On the inventory, or in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI)

: On the inventory, or in compliance with the inventory

Philippines. Inventory of
Chemicals and Chemical
Substances (PICCS)

: Not in compliance with the inventory

China. Inventory of Existing
Chemical Substances
(IECSC)

: On the inventory, or in compliance with the inventory

New Zealand. Inventory of
Chemicals (NZIoC), as

: Not in compliance with the inventory

SAFETY DATA SHEET



Sodium selenite pentahydrate

00163-25G

Version 1.4

Issuing date 12/19/2016

Revision Date 08/25/2022

Print Date 06/26/2023

published by ERMA New Zealand

Taiwan Chemical Substance Inventory (TCSI) : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 09/18/2017

Revision Date: 08/25/2022

Version 1.4

Issuing date 12/19/2016

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group